GETTERING USING VOIDS FORMED BY SURFACE TRANSFORMATION

Abstract of the Disclosure

One aspect of this disclosure relates to a method for creating a gettering site in a semiconductor wafer. In various embodiments, a predetermined arrangement of a plurality of holes is formed in the semiconductor wafer through a surface of the wafer. The wafer is annealed such that the wafer undergoes a surface transformation to transform the arrangement of the plurality of holes into a predetermined arrangement of at least one empty space of a predetermined size within the wafer to form the gettering site. One aspect relates to a semiconductor wafer. In various embodiments, the wafer includes at least one device region, and at least one gettering region located proximate to the at least one device region. The gettering region includes a precisely-determined arrangement of a plurality of precisely-formed voids that are formed within the wafer using a surface transformation process. Other aspects and embodiments are provided herein.

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